

## Contaminated Liquids Recycling System

The CLR-S system is intricately designed to advance sustainable concrete production, actively contributing to the establishment of environmentally conscious “Green Plants” by optimising the complete utilisation of wastewater in batching plants.

### KEY FEATURES

In response to depleting natural resources and the imperative need to reduce material consumption while enhancing the efficient use of resources through recycling, CLR-S emerges as a solution. As raw material prices and energy costs rise, manufacturers seek maximum benefit from their plants by recycling waste materials.

Amidst growing environmental awareness, stringent legal regulations, and international agreements prompting government inspections of industrial plants, the significance of Recovery and Recycling has escalated.

A significant challenge faced by batching plants is the proper disposal and underutilisation of grey water. CLR-S is the world’s only system capable of real-time density determination of grey water, feeding this crucial information back into the system.

The CLR-S system boasts the unique ability to measure contamination levels and density in real-time, ensuring the 100% utilisation of grey water. It facilitates the preparation of the grey-fresh water mixture in accordance with EN 1008 standards, defining water quality for concrete recycling.

The Liquid Contamination Analyser (LCA) integrated into the CLR-S system enables instantaneous analysis of particles within the grey water and real-time feedback to the plant software.



Scientific measurement of water and particle amounts within the grey water is achievable through the CLR System, allowing instant recalibration of aggregate, water, and cement quantities to align with the concrete recipe.

The seamless automatic data transfer between CLR-S and batching plant software ensures that all results are utilised by the plant PLC system in real-time.

## KEY BENEFITS

**Controlled Water Density:** CLR-S ensures continuous control over water density and provides instantaneous reporting.

**Integration and Automation:** The electric panel of CLR-S comprises high-tech components, making it seamlessly integrable into any automation system without requiring additional software or programs.

### Savings Achieved by Utilisation of CLR-S:

- Reduction in fresh water usage
- Decrease in aggregate and cement usage

In conclusion, CLR-S stands as a cutting-edge solution that not only addresses environmental concerns but also brings about substantial savings through its innovative approach to wastewater utilisation in concrete production.

## TECHNICAL DETAILS

### Reservoir Tank

- 3000lt cylindrical reservoir tank with mechanical components facilitating a total nominal capacity of 55m<sup>3</sup>/h for fresh and grey water
- Agitator and drive group for homogenisation
- Delivery capacity: 4" pipe – nominal 55m<sup>3</sup>/Hr. at 5bar
- Mounting legs
- Ladder and work platform above the tank
- Load cells for preventing overflow
- Main pump to deliver homogenised water to the plant

### Measuring System

- System sensor
- Processor
- Closed circuit pump for water circulation
- High-pressure nozzles and water pump for cleaning the sensor

## Electric Board

- Electrical control system
- Electric box suitable for outdoor use at -10°C to +40°C
- Controls for electric motor and level indicator
- PLC system including LED touchscreen

